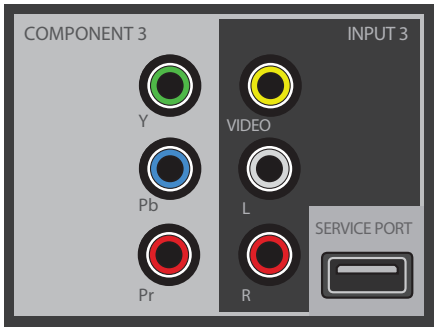
Connecting Your Home Theater

TV has come a long way since the early days, when you only had a couple of network broadcasts to choose from. Now what you watch can also come from a cable or satellite service, a DVD player, a VCR, a game console, or even from your computer.

Getting the Best Video and Sound Quality

Your Liquid Fidelity TV has many connection options, so you can choose the best way to hook up your DVD players, cable boxes, and other devices. Looking at all the different connectors can be overwhelming at first, but don't let it intimidate you: this guide will help you pick the best connections quickly.



Front Panel

Rear Panel

Examining Your Existing Equipment

The different jacks on the TV go with different types of connecting cables. These cables can make a big difference in the quality of the picture and sound delivered to your TV.

All these different cables do basically the same thing: they carry information from a device like a DVD player to the TV. This information is called a signal, and different cables are for different types of signals. Your new TV understands all the different signals, but some signals are better than others. The difference isn't so obvious with smaller televisions, but HD is all about getting a great picture and sound, and high-quality signals from your devices give much better results.

Before you connect devices to your TV, it's best to take a moment to plan how you're going to handle each one. The best connection to your old TV might not be the best way to connect to your new HD TV. Look at your devices' manuals to find out what connections are available, or look at the connectors on the back of the device. Then compare those connections with the table on the next page.

For each device you want to hook up, compare its connectors to this list and decide which is the best. Just start at the top and go down the list until you find a connector that matches one of the connectors on your device. Here are some examples:

- A DVD player is connected to the old SD TV with an S-Video cable. Looking at the back, there is an A/V connector, an S-Video connector, and Y, Pb, Pr connectors. Since the Y, Pb, Pr connection is better than S-Video, this is the best to use for the HD TV.

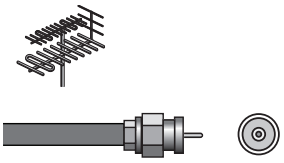
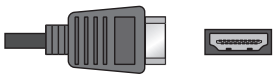
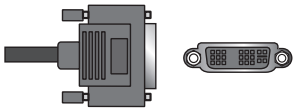
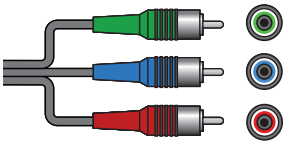
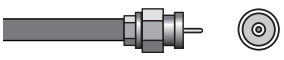
- A VCR is connected to the old SD TV with an A/V cable. Looking at the back, that's the only type of connector available besides the antenna out. The A/V cable is the best choice for this VCR. (The antenna connection only carries the signal from an antenna, not video tapes. To find out more about antennas, see "Connecting to an HD Antenna" on page 34.)

- A new Blu-Ray Disc™ player has Y, Pb, Pr connectors and an HDMI connector. The HDMI connection is your best option.

If you're changing your connection strategy, you may need additional cables or adapters, but they're usually not very expensive—you can find them at electronics stores or online—and you'll be bringing the best picture to your TV.

Connectors and Cables

Here are the types of connectors and cables you can use, starting with the best:

	Connection	What It Looks Like	How It Works
Best	Digital Antenna (ATSC)		Over-the-air digital channels will have a great picture compared to channels from an analog antenna or cable. In many areas, HD channels are available over the air.
	HDMI		HDMI cables were designed for carrying digital HD signals, perfect for your new HD TV. They bring you the best quality video and audio in a single cable.
	DVI		DVI also carries a great HD digital signal. DVI connects to the HDMI-1 input with a DVI/HDMI adapter. A second cable carries the audio signal.
	Component (Y, Pb, Pr)		Component (Y, Pb, Pr) video uses a very high-quality analog HD signal that sends the picture information over three separate parts of the cable. A second cable carries stereo audio.
Better	S-Video		S-video carries a good SD signal, using two channels for picture information. A separate cable carries stereo or mono audio.
Good	A/V		A/V or "composite" video uses only one signal to deliver SD picture information. A separate cable carries stereo or mono audio.
	Analog Cable/ Analog Antenna (NTSC)		Channels from analog cable and antennas are SD. The coaxial cable that carries the signal does a fine job, but the signal itself might not be that clear.

Connecting to a Device with a Digital Video Interface (DVI)

Many devices use Digital Video Interface (DVI) cables to connect to a TV, including these:

- personal computers and laptops
- first-generation HD video products, including many HD cable boxes

With a DVI-HDMI adapter, you can connect a DVI cable to the HDMI-1 input on your TV. You can also use a DVI-to-HDMI cable, if you have one.

Since DVI cables only carry the picture, you'll also need to use a DVI audio cable, connected to the DVI Audio jacks next to the HDMI-1 jack.

Connecting Tips

- Plan your connections before you hook anything up. Make a list of devices to connect and which cables you want to use.
- Confused about how a particular device should be connected? Check the device's documentation for hints.
- Connect one device at a time, and then check it before moving to the next one.

Connecting to a Cable or Satellite Receiver or DVD Player

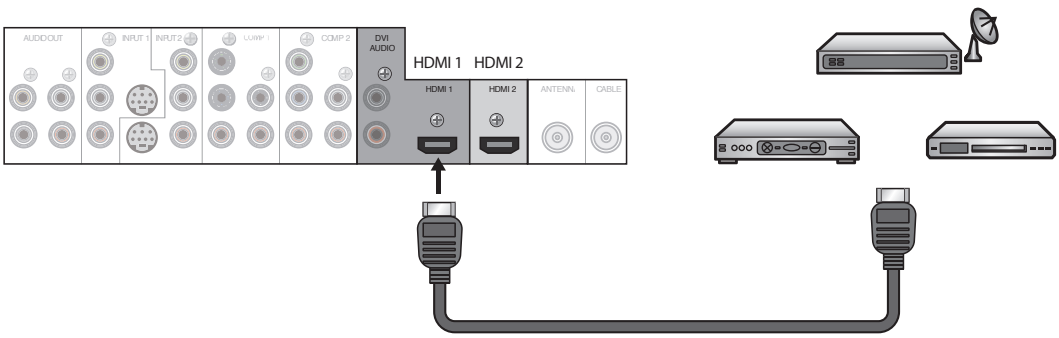
If you're connecting a cable or satellite receiver and a VCR, see "Connecting to a VCR" on page 28.

If you're connecting an over-the-air antenna with your cable or satellite receiver, see "Connecting to an HD Antenna through a Satellite Receiver, DVR, or VCR" on page 32.

After you connect your DVD player, you may need to change its aspect ratio setting to match your 16:9 widescreen TV. This setting is often in the DVD player's system menu—check your DVD player user manual for details.

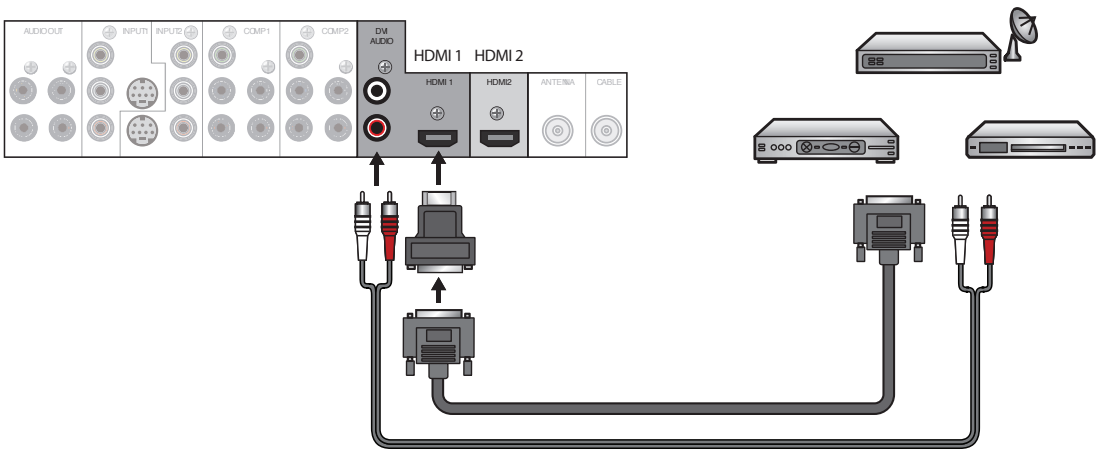
If Your Receiver or DVD Player Has an HDMI Connector

1. Turn off the power to your TV and receiver or DVD player.
2. For cable or satellite receivers: Make sure the receiver is connected to the cable or satellite. Check your receiver documentation for details.
3. On the receiver or DVD player: Connect the HDMI cable to the HDMI connector.
4. On the TV: Connect the other end of the HDMI cable to the HDMI-1 or HDMI-2 connector on the back of the TV.
5. Finally, you can set up the TV to know about the cable, satellite, or DVD signal. See "Setting Up Input Sources" on page 47.



If Your Receiver or DVD Player Has a DVI Connector

1. Turn off the power to your TV and receiver or DVD player.
2. For cable or satellite receivers: Make sure the receiver is connected to the cable or satellite. Check your receiver documentation for details.
3. On the receiver or DVD player: Connect the DVI cable to the DVI connector.
4. On the cable: Attach a DVI-to-HDMI adapter to the other end of the cable.
5. On the TV: Connect the HDMI adapter to the HDMI-1 connector on the back of the TV.
6. On the receiver or DVD player: Connect an audio cable to the Audio Out jacks: match the white plug to the L jack and the red plug to the R jack.
7. On the TV: Connect the other end of the audio cable to the DVI Audio L and R jacks next to the HDMI-1 connector.
8. Finally, you can set up the TV to know about the cable, satellite, or DVD signal. See "Setting Up Input Sources" on page 47.



If Your Receiver Has Y, Pb, Pr Connectors (Component Video)

Component video jacks are green, blue, and red with labels that say Y, Pb, and Pr.

1. Turn off the power to your TV and receiver or DVD player.

2. For cable or satellite receivers: Make sure the receiver is connected to the cable or satellite. Check your receiver documentation for details.

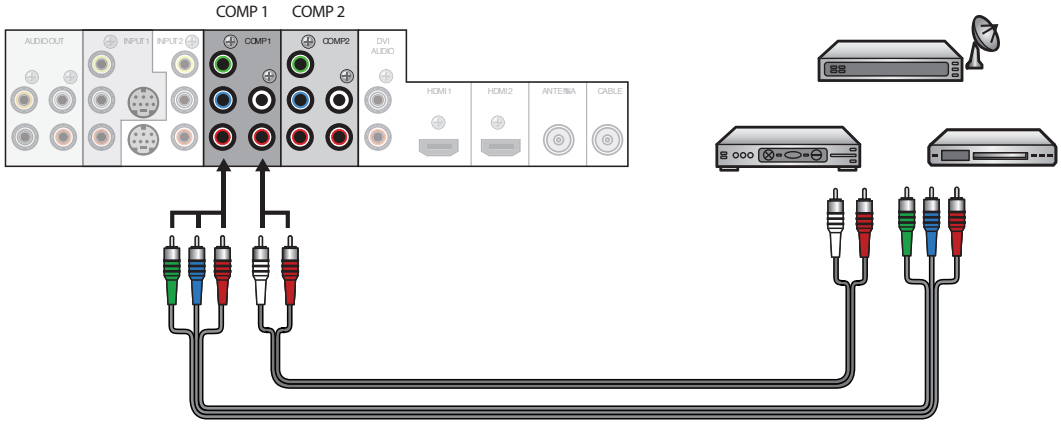
3. On the receiver or DVD player: Connect the Y, Pb, and Pr connectors from the component cable to the corresponding jacks. Match the cable colors to the jack colors: the green plug goes into the Y jack, the blue plug into the Pb, and the red into the Pr.

4. On the TV: Connect the other end of the component cable to the COMPONENT-1 or COMPONENT-2 input. Again, match the colors of the plugs to the colors of the jacks.

5. On the receiver or DVD player: Connect an audio cable to the Audio Out jacks: match the white plug to the L jack and the red plug to the R jack.

6. On the TV: Connect the other end of the audio cable to the L and R jacks under the COMPONENT-1 or COMPONENT-2 label.

7. Finally, you can set up the TV to know about the cable, satellite, or DVD signal. See "Setting Up Input Sources" on page 47.



If Your Receiver Has an S-Video Connector

If your receiver or DVD player only has S-Video and A/V (composite video) connectors, you're only getting standard definition (SD) programs, not high definition (HD). For the best picture and sound, consider upgrading your cable or satellite to an HD package.

1. Turn off the power to your TV and receiver or DVD player.

2. For cable or satellite receivers: Make sure the receiver is connected to the cable or satellite. Check your receiver documentation for details.

3. On the receiver or DVD player: Connect the S-Video cable to the corresponding jack.

4. On the TV: Connect the other end of the S-Video cable to the S VIDEO-1 or S VIDEO-2 input.

5. On the receiver or DVD player: Connect an audio cable to the Audio Out jacks: match the white plug to the L jack and the red plug to the R jack.

6. On the TV: Connect the other end of the audio cable to the L and R jacks under the INPUT-1 or INPUT-2 label.

7. Finally, you can set up the TV to know about the cable, satellite, or DVD signal. See "Setting Up Input Sources" on page 47.